

**WHAT IS CLAIMED IS:**

1. A method for generating a primary document for a device in a semiconductor manufacturing environment, wherein the primary document is used to characterize the device, and wherein the primary document is generated using a computer associated with the semiconductor manufacturing environment, the method comprising:

creating a design rule that defines a relationship between first and second technologies;  
creating a primary document template for a device in the first technology;  
creating at least one input file to associate information from a plurality of secondary documents with the primary document template;  
generating the primary document by retrieving information from the secondary documents and inserting the retrieved information into the primary document template based on the input file; and  
applying the design rule to identify a corresponding device in the second technology.

2. The method of claim 1 wherein defining the relationship between the first and second technologies includes creating a device truth table.

3. The method of claim 1 wherein retrieving information from the secondary documents includes retrieving information from a model card assigned to the device.

4. The method of claim 1 further comprising performing a simulation using a model of the device, wherein the simulation produces information for insertion into the primary document template.

5. The method of claim 1 further comprising sending a notification that the corresponding device in the second technology should be updated to reflect the primary document.

6. The method of claim 5 further comprising defining a period of time in which a response to the notification must be submitted.

7. The method of claim 6 wherein the response indicates that the update is performed or not performed.

8. The method of claim 1 further comprising providing an instruction set for parsing the input file and generating the primary document.

9. The method of claim 1 wherein creating the primary document template includes creating a plurality of sections and subsections, wherein at least some of the sections and subsections are associated with an input file.

10. A method for generating a primary document in a semiconductor fabrication environment using a plurality of secondary documents and at least one input file, the method comprising:

defining at least a first device within a first technology area and a second device within a second technology area, wherein the first and second devices include at least one common element;

updating information defining the common element with respect to the first device;  
generating a primary document for the first device based on the updated information;  
sending a notification that the common element has been updated with respect to the first device; and

determining whether to update the common element with respect to the second device.

11. The method of claim 10 wherein generating the primary document includes:  
providing an instruction set forming rules for parsing a plurality of secondary documents associated with the first device;

dividing a primary document template into a plurality of sections;  
creating an input file for at least some of the sections, wherein each input file defines information to be inserted into the corresponding section;

applying the rules to extract information from the secondary documents, wherein the extraction includes parsing the information and inserting the parsed information into the corresponding section based on the input file; and

combining the plurality of sections into the primary document based on the primary document template.

12. The method of claim 11 wherein each input file identifies which of the secondary documents to parse for the corresponding section.

13. The method of claim 11 wherein each section includes a text body and at least one field embedded in the text body, wherein information is inserted into the field.

14. The method of claim 10 further comprising generating a monitoring report based on the primary document to show whether the common element was updated with respect to the second device.

15. The method of claim 10 wherein updating information defining the common element with respect to the first device includes updating a model card assigned to a model representing the first device.

16. The method of claim 10 wherein updating information defining the common element with respect to the first device includes updating an import file assigned to a model representing the first device.

17. The method of claim 10 further comprising:  
identifying a model associated with the first device, and  
executing a simulation using the model to provide simulation results, wherein updating information defining the common element with respect to the first device uses the simulation results.

18. A system for combining a plurality of secondary documents into a primary document for use in a semiconductor manufacturing system, the system comprising:

the plurality of secondary documents, wherein each secondary document is associated with a first or second technology;

a device definition table describing a first semiconductor device formed in accordance with the first technology and a second semiconductor device formed in accordance with the second technology, wherein the first and second devices contain a common element;

a primary document template for the first device and a plurality of input files corresponding to sections of the primary document template; and

a primary document assembly engine for generating the primary document, the engine adapted to execute a plurality of instructions including:

instructions for applying a predefined set of rules to parse information from the secondary documents based on the input files when the common element is updated with respect to the first device;

instructions for inserting the parsed information into the corresponding sections based on the input files;

instructions for combining the sections into the primary document based on the primary document template; and

instructions for notifying a user responsible for the second device that the common element has been updated with respect to the first device.

19. The system of claim 18 further comprising:

a plurality of manufacturing entities containing the secondary documents; and

a network connecting the manufacturing entities with the primary document assembly engine.

20. The system of claim 18 further comprising instructions for automatically converting information from the secondary documents into a predefined format.

21. The system of claim 18 further comprising instructions for identifying a most recent version of each of the secondary documents and automatically parsing information from the most recent version.

22. The system of claim 18 further comprising:  
instructions for executing a simulation using a model of the first device; and  
instructions for including results from the simulation when generating the primary document.